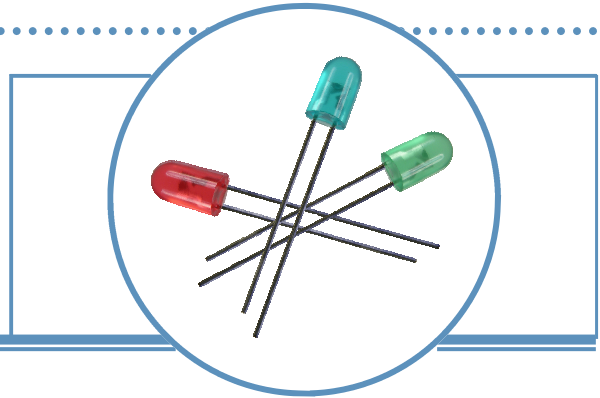


Round Blue Through-hole LED Lamp (3mm)

OVLBB4C7

- High Brightness with Well-defined Spatial Radiation Patterns
- UV-resistant Epoxy Lens
- Blue (470nm)

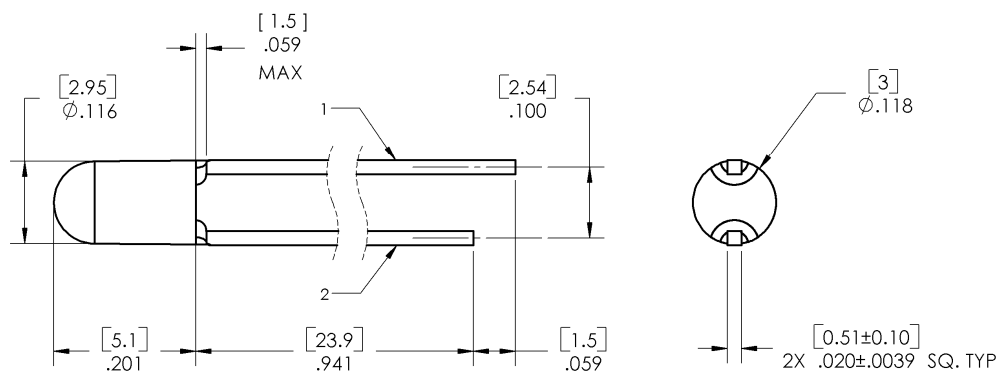


The OVLBB4C7 is a high-intensity InGaN LED mounted in a clear plastic T-1 package. Its UV-resistant epoxy lens makes this device an optimal solution for outdoor applications. This LED provides a well-defined and even emission pattern.

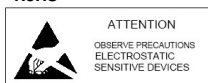
Applications

- Pedestrian Signals
- Signage and Architectural Lighting
- Backlighting
- Automotive

| Part Number | Material | Emitted Color | Intensity Typ. mcd | Lens Color |
|-------------|----------|---------------|--------------------|-------------|
| OVLBB4C7 | InGaN | Blue | 900 | Water Clear |



1 ANODE 2 CATHODE DIMENSIONS ARE IN INCHES AND [MILLIMETERS].



OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.

Round Blue Through-hole LED (3mm) OVLBB4C7

Absolute Maximum Ratings

$T_A = 25^\circ\text{C}$ unless otherwise noted

| | |
|---|--------------|
| Storage Temperature Range | -40 ~ +100°C |
| Operating Temperature Range | -40 ~ +85°C |
| Reverse Voltage | 5 V |
| Continuous Forward Current | 20 mA |
| Peak Forward Current (10% Duty Cycle, 1KHz) | 50 mA |
| Power Dissipation | 80 mW |
| Current Linearity vs. Ambient Temperature | -0.2 mA/°C |
| LED Junction Temperature | 125°C |
| Lead Soldering Temperature (3mm from the base of the epoxy bulb) ¹ | 260°C |

Note:

- Solder time less than 5 seconds at temperature extreme.

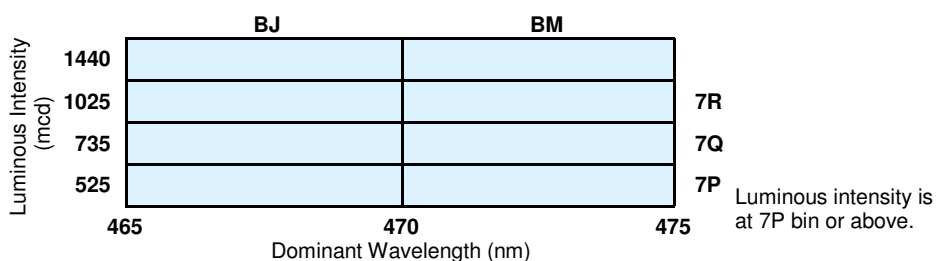
Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

| SYMBOL | PARAMETER | MIN | TYP | MAX | UNITS | CONDITIONS |
|---------------------------|---------------------|------|------|------|---------------|---------------------|
| I_V | Luminous Intensity | 525 | 900 | ---- | mcd | $I_F = 20\text{mA}$ |
| V_F | Forward Voltage | ---- | 3.4 | 4.0 | V | $I_F = 20\text{mA}$ |
| I_R | Reverse Current | ---- | ---- | 50 | μA | $V_R = 5\text{V}$ |
| λ_P | Peak Wavelength | ---- | 466 | ---- | nm | $I_F = 20\text{mA}$ |
| λ_D | Dominant Wavelength | 465 | 470 | 475 | nm | $I_F = 20\text{mA}$ |
| $2\Theta_{1/2\text{H-H}}$ | 50% Power Angle | ---- | 45 | ---- | deg | $I_F = 20\text{mA}$ |

Standard Bins ($I_F = 20\text{mA}$)

Lamps are sorted to luminous intensity (I_V) and dominant wavelength (λ_D) bins shown. Orders for OVLBB4C7 may be filled with any or all bins contained as below.



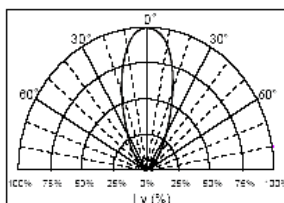
Forward Volt-

| Rank | H | J | K | L |
|---------|---------|---------|---------|---------|
| Voltage | 2.6-3.0 | 3.0-3.3 | 3.3-3.6 | 3.6-4.0 |

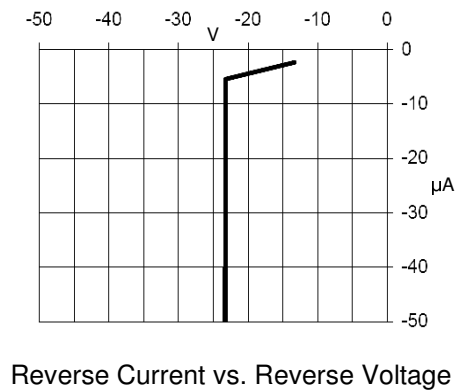
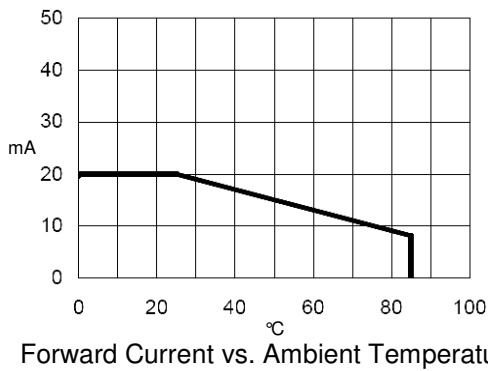
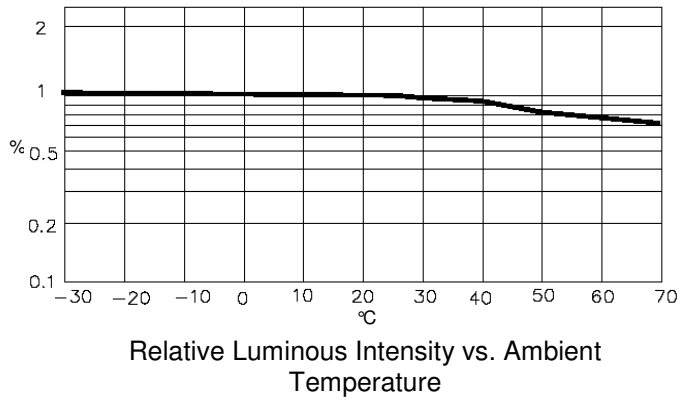
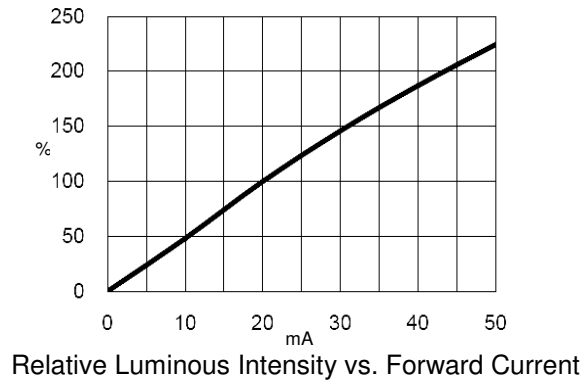
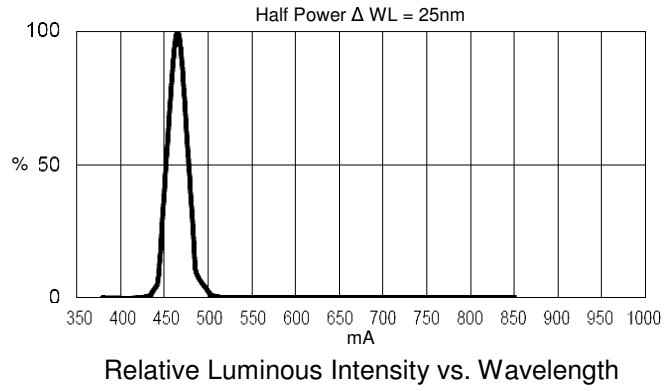
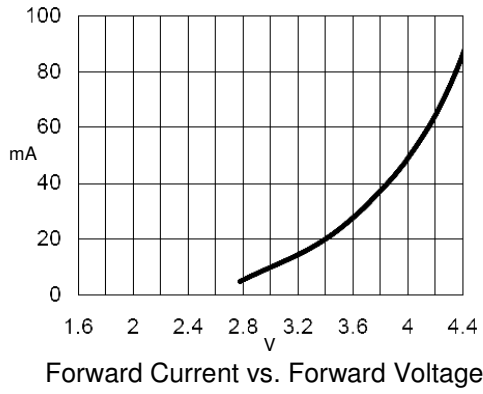
Important Notes:

- All ranks will be included per delivery, rank ratio will be based on the chip distribution.
- To designate luminous intensity ranks, please contact OPTEK.
- Pb content <1000PPM.

Beam Pattern

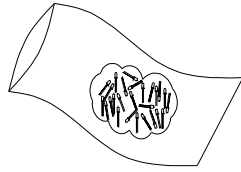


Typical Electro-Optical Characteristics Curves

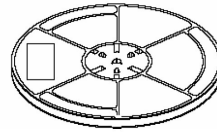


Round Blue Through-hole LED (3mm) OVLBB4C7

Packing Information: Available in Bulk or Reel

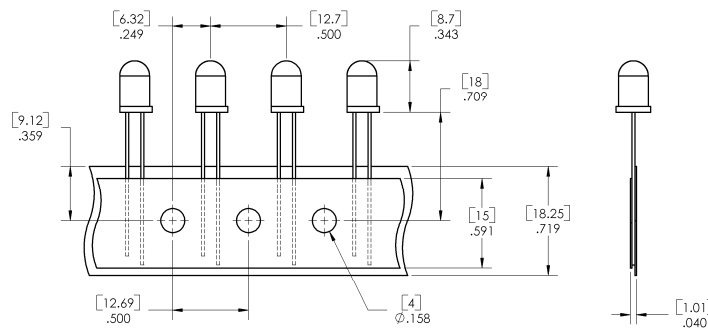


Bulk: 500 pcs/bag



13-Inch Reel: 2500 pcs/reel

Carrier Tape Dimensions



DIMENSIONS ARE IN INCHES AND [MILLIMETERS].

Moisture Resistant Reel Packaging

